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10/561,648

12/20/2005

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EXAMINER

MA, JAMESON Q

ART UNIT

PAPER NUMBER

1797

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/561,648 | <b>Applicant(s)</b><br>HIBINO ET AL. |  |
|                              | <b>Examiner</b><br>JAMESON Q. MA     | <b>Art Unit</b><br>1797              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20051220</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: the culture container should be positively recited as part of the claimed apparatus if it is to be included in the apparatus. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 1 is indefinite because it is unclear how the sheet member can be arranged below a culture container and above a top surface of a treatment device, if the treatment device is also opening a lid of the culture container. In view of the specification, the first recitation of a 'treatment device' in line 2 of claim 1 is being treated as a distinct component from the second recitation of a 'treatment device' as in line 7 of claim 1.
5. The recitation 'which covers a top surface of said treatment device' renders the claim indefinite because the claim only requires a sheet member to be arranged in the treatment chamber or culture chamber. However, said indefinite recitation also requires that the sheet member covers a top surface of *said treatment device*, which is only found in the treatment chamber and not the culture chamber.

***Claim Interpretation***

6. For claims 1-11, it is noted that a recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art, if the prior art has the capability to so perform.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 5 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Taggart (US 6,536,188).

Regarding claim 1, Taggart discloses a culture treatment apparatus comprising: a treatment chamber in which is stored a treatment device which opens a lid of a culture container storing a specimen to perform a predetermined treatment on the specimen inside of the culture container (see figs. 1 and 14 and C12/L52-58: lifting apparatus 286 comprising gripper 288 is fully capable of opening a lid of bottle 12); and a sheet member arranged below the culture container (see figs. 8, 14: conveying belt 94), which covers a top surface of said treatment device.

For claims 2 and 3, Taggart discloses the conveying belt being in an endless form (see fig. 3) and thus meets all of the limitations of claims 2 and 3.

For claim 5, Taggart discloses the apparatus comprising a solution supply device (see fig. 4 and C6/L24-31: spray nozzles 64 provide a fine mist) which is capable of

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impregnating said sheet member (see figs. 4 and 8: impregnating is being interpreted as "to fill interstices with a substance" and thus the mist of spray nozzle 64 is seen as capable of filling the apertures of conveying plate 94 with a liquid).

Regarding claim 11, Taggart discloses an apparatus with a culture chamber which stores a culture container storing a specimen in a manner where it can be put in/taken out (see fig. 3: vertical lanes 26 and 32 are viewed as culture chambers);

a treatment chamber (area surrounding lifting apparatus 286) which is arranged outside of said culture chamber, and which stores a treatment device which is capable of opening a lid (see figs. 1 and 14 and C12/L52-58: lifting apparatus 286 comprising gripper 288 is fully capable of opening a lid of bottle 12);

a carrier mechanism which carries the culture container between the treatment chamber and the culture chamber and a sheet member arranged in either the treatment chamber or culture chamber (see figs. 3 and 8: conveying plate 94 is both a carrier mechanism and a sheet member);

9. Claims 1-3 and 6 rejected under 35 U.S.C. 102(b) as being anticipated by Astle (US 4,470,744).

Regarding claim 1, Astle discloses a culture treatment apparatus comprising: a treatment chamber in which is stored a treatment device (see abstract: robotic arm) which opens a lid of a culture container (the robotic arm disclosed by Astle must be capable of both horizontal and vertical motion, and is thus viewed as being capable of opening a lid of a container) storing a specimen to perform a predetermined treatment on the specimen inside of the culture container; and a sheet member (see fig. 2:

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traveling polyester curtain 42) arranged below the culture container, which covers a top surface of said treatment device.

The robotic arm disclosed by Astle is located outside of bioassay incubator. It is viewed that this arm is located within a 'treatment chamber.'

For claims 2 and 3, Astle discloses a supply roll made from said sheet member in belt shape rolled into a roll shape; a sheet supply device which sends out the sheet member from said supply roll; and a sheet collection device which collects the used sheet member and wherein said sheet collection device comprises a roll-up device which rolls up the sheet member into a roll shape (see fig. 7).

For claim 6, Astle discloses that the access window and sealing apparatus are meant to substantially seal the robotic access opening to minimize disturbance of the interior environment of the incubator, and is thus viewed as having an 'antibacterial action.'

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taggart (US 6,536,188).

Regarding claim 4, Taggart discloses all of the claim limitations as set forth above. While Taggart discloses a conveying plate/belt, the reference does not explicitly disclose a material that the plate is made from. However, it is very well known in the conveyor art that rubber is a very common substance used in conveying belts due to its durability and elasticity. Additionally, on some level, rubber is a 'liquid absorbable material.'

It would have been obvious to one of ordinary skill in the art to make the conveying plate/belt (94) in the apparatus of Taggart, out of rubber in to provide a durable and elastic material for use in the conveying mechanism.

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14. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astle (US 5,470,744) in view of Bunn et al. (US 6,803,239).

Regarding claims 7-10, Astle discloses all of the claim limitations as set forth above. Additionally, Astle discloses both a tray supply device and a tray collection device in the form of a robotic arm (see abstract). Additionally, Astle discloses that the incubator disclosed is to be used with bioassay trays in general (see C2/L8-27). Astle does not explicitly disclose the apparatus comprising both a tray member with a culture container mounted on the tray member, the tray member comprising fixing portions and a peripheral wall which surrounds the culture container.

Bunn discloses a multi-slide assembly including various components that facilitate testing of samples with minimal manipulation of assay components. Bunn further discloses that the device permits both culturing and analysis of each test sample (see abstract). Figure 1 of Bunn discloses a tray (frame 100) with a culture container (multiwell slide 30), the culture container having a lid (strip cap 50). Figure 1 also shows the tray comprising fixing portions (access apertures 162) and a peripheral wall which surrounds a culture container.

It would have been obvious to one of ordinary skill in the art at the time of invention to use the multi-well culturing slide apparatus of Bunn, in the incubator of Astle in order to facilitate testing of samples with minimal manipulation of assay components, Further, using the assembly of Bunn in the incubator of Astle would have resulted in nothing more than choosing from a finite number of identified and predictable solutions of culture containers with a reasonable expectation of success.



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***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMESON Q. MA whose telephone number is (571)270-7063. The examiner can normally be reached on M-R 8:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM

/Jill Warden/  
Supervisory Patent Examiner, Art Unit 1797

April 10, 2009